

June 8, 1961

Investor's Reader

UNIVERSITY OF ILLINOIS
LIBRARY

JUN 10 1960

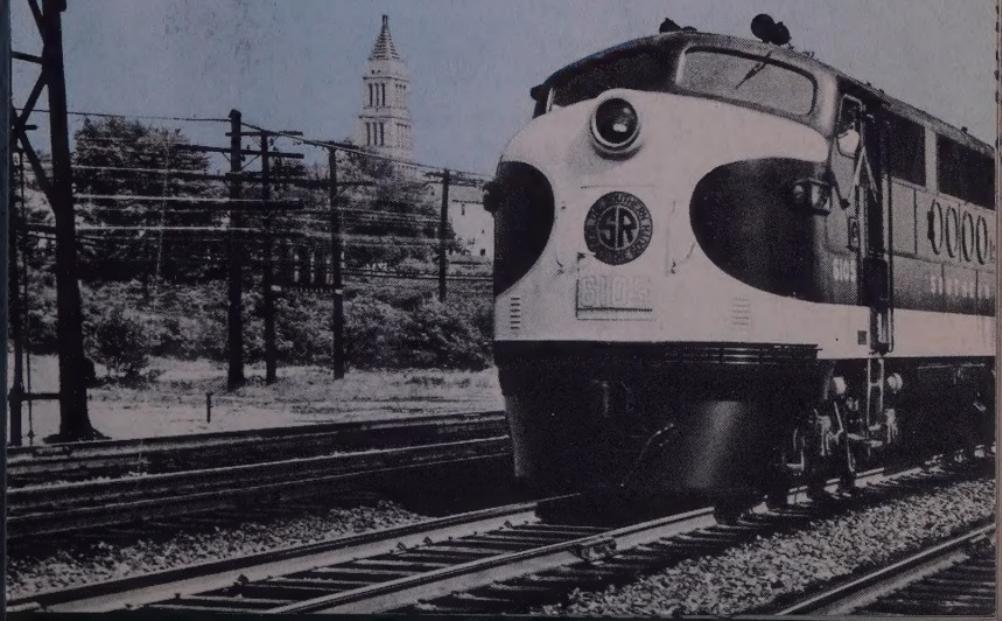
CHICAGO

JUNE

8,

1960

SPECIAL ISSUE: RAILROADS



WELL TRAINED . . . WELL TRAVELED

This is Sue of Northern Pacific—a sign of glamor on one crack passenger train. Sue represents the ten stewardess-nurses who ride the North Coast Limited between Chicago and Seattle.

Like a number of other roads, Northern Pacific added these admittedly airline-like hostesses in 1955 to dress up service, increase comfort and attract new passengers. Says NP spokesman Lon L Perrin: "The girls are carefully picked for the job. They're 21-to-28 and attractive. All are registered nurses."

The girls train one week in Seattle, then take a student run over the route before officially donning green uniforms. Before the summer season they tour Yellowstone and Mount Rainier National Parks to better answer the questions of vista-dome passengers.

Once aboard, a stewardess-nurse covers 4,600 miles in two 48-hour runs, then has a four-day rest. In line of duty she provides train and travel information, assists invalids or parents with youngsters, looks after children traveling alone and does whatever else she can for the enjoyment of her passengers. Northern Pacific passengers can also enjoy the facilities of Budd Company's new Slumbercoach, a popular economy sleeper now entracked on five US railroads. On the Chicago to Seattle run the Slumbercoach costs \$86 v \$142 on Pullman and \$90 by aircoach. Said a recent passenger: "I'd prefer a roomette except for cost, but I like this cost."

Despite such popularizing efforts, rail passenger service loses a bundle every year. Last year's hefty deficit of \$544,000,000 is hopeful only when compared to \$610,000,000 in 1958 and a record \$724,000,000 loss in 1957. In fact US railroads have not made money on peacetime passenger service since at least 1929.





Investor's Reader

No. 12 Vol. 34

June 8, 1960

A Fresh Look at US Railroads

NEW AND OLD investors alike would hardly believe what has happened to railroad common stocks over the past 60 years.

At the turn of the century railroad stocks were the glamor issues of the era. The romantic escapade of a railroad baron or an open fight between two railroad giants sent stocks high-ballng. With fond remembrances of the Golden Spike (Union Pacific and Central Pacific in 1869), speculators pushed rail stocks up & down in frantic fashion. The famed Northern Pacific corner (\$145 to \$1,000 a share in a single day in 1950) made newspaper headlines and attracted more hopeful speculators.

Nobody paid much attention to the statistics but around 1900 rail shares represented 50% of the total value of all stocks on the New York Stock Exchange. Perhaps more significant was that on many days a single rail stock would dominate the whole ticker tape. The average price was above \$100 a share—for this was a game for big money only.

During World War I there were some uncomfortable months of Government operation. But the war was won and in the High Twenties every respectable portfolio still had its share of solid railroad stocks yielding up to 7% with a promise of more to come.

The pattern of transportation changed. Along came private automobiles to steal the short haul passenger business, buses to grab the long haul business, trucks to carry freight. But even in the Great Depression—when one-third of all US railroad mileage was in bankruptcy—investors still had enough confidence to buy rail stocks at prices seldom reached thereafter. As one example Pennsylvania sold at 42 $\frac{1}{4}$ in 1933 compared with a 1960 low of 12 $\frac{7}{8}$.

The pattern changed even more. Along came the soaring airlines and bigger trucks and better highways and brand new pipelines

and a resurgence of the waterways. In most cases the airplanes landed on almost free airstrips, the trucks rolled on almost free expressways and the barges floated on Federal waterways.

In the boom after War II the confidence of investors sagged anew as rail revenues failed to match rising national income. This magnified other latent problems such as labor costs, high taxes, excess trackage and seemingly endless Government control and regulation. The confidence of the general public sagged as freight and passenger service deteriorated and there were published stories of management mis-management.

Along with these things are some interesting statistics. Total revenues of all Class I carriers (over \$3,000,000 a year) amounted to 10% of gross national product in the Gay Nineties but in the middle of 1960 it was less than 2% (see inside back cover charts).

In 1902 the Dow-Jones average of rail stocks reached a high of 130, almost double the industrial high of 68. Today the same rail average at 140 is less than one-quarter of the industrial index. And in mid-1960 the total value of 80-odd rail stocks on the Big Board was \$6.3 billion or a smidgen over 2% of the total value of all stocks.

The Problems and Promise of Today

From an investment point of view, an often overlooked asset is the tremendous physical plant of the railroads—at well-depreciated values to boot. Several years ago an ICC study showed total railroad plant (not counting rolling stock) which cost \$19 billion could not be duplicated for less than \$47 billion.

While many investors think of railroads as a laggard industry, they have spent \$15 billion on capital improvements since the end of War II. Equally important they have been able to abandon 9,600 miles of needless track in the past 15 years and thus whittle total Class I mileage to 218,000 miles. In essence, today's plant is leaner and healthier than any time in railroad history.

"Unless we are careful, we will find the railroads will not have the ability and capability of handling the load—of mail, of defense freight, and of private business—which we expect them to carry when other forms of transportation temporarily fail or when special needs arise."

Hon Glenn Cunningham of Nebraska
in the House of Representatives,
Thursday, March 10, 1960.

Much more must be done. A Norfolk & Western spokesman says 10% of the nation's mileage carries 50% of all freight volume while 30% of all trackage carries 2% of the freight. Obviously the light-density track loses money. The trouble is the roads tangle with violent opposition almost any time they try to drop a track or even a train. Civic pride is invisible but powerful. One example is the Pennsylvania's passenger service between Trenton and Phillipsburg, NJ. Because the average load is six passengers a day, the road has fought for five years to discontinue the service. So far, no luck.

The railroads have many assets which are discussed in detail elsewhere in this book. To give but three examples:

- The Pennsylvania's investment in the Norfolk & Western is worth about \$18 a Pennsy share at going market prices or almost 50% more than the price of the parent company stock. Of course the Pennsy considers this a prize investment and it may never spin off its N&W shares.
- In Manhattan alone the air rights of NY Central are valued above one-quarter of a billion—only a fraction of which appears on the formal balance sheet.
- Although Northern Pacific owns 3,000,000 choice acres of oil & gas properties in the Williston Basin they have yet to make a substantial contribution to overall profits. Someday maybe.

Out of inclination—and necessity—more & more railroads are willing to try new ideas. The hottest example is piggyback, small in total revenues but growing fast (see page 25). Other major examples: electronic yards, the extension of CTC (centralized traffic control).

Roaring down the track are the long awaited mergers which many rail executives think are a solution to many economic problems. Mergers are designed to save money but specific savings are often hard to find. But here are two from the December 1 marriage of Norfolk & Western and Virginian: 1) to eliminate duplicate facil-

"Something certainly will have to be done and quickly if we are not to suffer the irreparable loss of a nationwide system for moving goods and people to those other types of travel that cannot cope with the vagaries of weather, to say nothing of the unpredictable demands [of] wartime."

Hon Paul B Dague of Pennsylvania
in the House of Representatives,
Friday, March 18, 1960.

ties the Virginian's Sewells Point coal piers in Norfolk have been closed; 2) with new connections the N&W will eliminate the Allegheny Mountain grade and thus can haul 77% more coal with the same diesel units.

Perhaps most important of all is the slow but definite change in railroad management. The robber barons, financial manipulators and their sit-pat successors have been replaced by younger, more aggressive men whose main objective is to revitalize a road. There are dozens across the country but three top representatives are: 1) NY Central boss Alfred Perlman, 58, a crack operating man who has had his troubles with a rich but mired Eastern road; 2) ACL president Tom Rice, 48, who helped engineer the proposed merger with Seaboard; 3) lawyer-trained N&W president Stuart Saunders, 51, who reported a fabulous 25% profit carry-through in 1959 but added "we must do better."

A Little of the Old with the New

Despite the modern touch, many railroaders cling tenaciously to the old. A shift in other industries is a "trick" or a "tour" and nothing else; many rail lawyers are called "solicitors;" female help is often scorned in favor of "more dependable" male secretaries and clerks; job titles such as "gandy-dancer" and "nut-runner" are still used even though the jobs have changed.

Worse yet, the powerful Brotherhoods stand pat on work rules first written decades ago. One example: a day's work for a passenger train engineer is 150 miles even if his locomotive can go 90 miles an hour. Right now the nation's carriers are faced with a battle over a proposed shake-out of the featherbeds.

At this stage in railroad history the industry offers investors little in the way of overall growth as typified by chemicals, electronics or drugs. Meanwhile—as usual—the roads will be battered by the powerful Brotherhoods for higher & higher wages.

To what extent railroad common stocks have discounted the bad news is unknown. But at a time when many glamor stocks sell at 20, 40 or even 80 times earnings, sound rail shares look cheap at six or ten times earnings. Here enters investor psychology. When the railroads were in deep trouble in the Thirties, investors bought with confidence. Now the roads are in healthier shape but investor confidence is lacking. Perhaps it will be stimulated by a better political climate, renewed vitality of the roads and the publicity attending the money-saving mergers.

Regulation on the Rails

LEANING BACK from his sleek teakwood-top desk, Frank C Tighe, senior traffic manager at Union Carbide Corp, took a deep breath and a long reflective look at the railroads: "The old concept that the rails are big, rich, ruthless and lethargic is gone forever but like a good wife they are too often taken for granted." A traffic man for a quarter century, amiable, soft-spoken Frank Tighe comes well equipped to recount rail transport history.

"In the beginning the shippers had the railroads and just about nothing more," relates shipper Tighe. "Rate making then was a simple process. Rates were based on mileage and freight was divided into classes—manufactured goods in the first class, pigs and goats in the middle and coal, ore and sand in the lowest class." Much of this original freight classification still exists.

Frank Tighe continues: "As for actual shipping costs in those days, a rail freight agent ran about with a hatful of rates. He might quote you one rate and your competitor another. Furthermore, if your destination was also served by another railroad, you might pay much less than someone whose shipment went to a stop halfway down the line but where there was no competition. The railroaders were out to charge all that the traffic would bear—and a little more."

The Birth of Regulation

As abuses mounted, the Federal Government finally intervened in the public behalf. In 1887 President Grover Cleveland signed an "Act to Regulate Commerce." It set up the Interstate Commerce Commission to establish rates which would be "reasonable and just." This marked the Government's debut in regulating a whole section of private enterprise. Congress for the first time delegated judicial, administrative as well as legislative authority to a permanent

C&NW de-weeds its track



body. The start was simple as well as essential but regulations spread like weeds between crossties and eventually threatened to overgrow the tracks. The railroads are still clamoring for an effective weed killer. They are grateful for the first although meager start with the Transportation Act of 1958.

The original Interstate Commerce Act contained ten relatively simple sections. Its sole purpose was to arbitrate shipper-rail relations. Three decades and several acts later the Transportation Act of 1920 ushered in a new scope of Federal regulation. Its objective was a healthy rail system adequate to meet the needs of the public. It directed the ICC to consider an adequate return for the rails. The Commission was authorized to prescribe minimum rates. It could also change intrastate rates if they proved an "undue burden" on interstate commerce. Consolidations were to be encouraged in hope strong roads would absorb weaker ones; in the following years the ICC spent much time working out its own plans to lump all the roads into a few major rail systems but the merger train never even left the yard.

The amendments continue to pile up. The Act has mushroomed into a legal complex 636 pages long. The statutes are filled with ambiguities, "may or may nots" and "under substantially similar circum-

Ocean trip for NY Central Flexi-Van



stances." The Commission's jurisdiction has been extended to include commercial transportation on the highways and waterways as well as oil pipelines, freight forwarders. Rates are still the primary concern but the ICC rules on operating authorities, safety devices, accounting methods, mergers and even stock splits.

While the ICC is an independent agency, it is of course governed by the basic rules enacted by Congress. Quite naturally, it also tends to give consideration to the prevailing policies of the Administration.

Comments NY Central attorney Robert Brooks: "The rails have been regulated on a sociological rather than on an economic basis. For example the Government has attempted to bolster the agrarian economy at the expense of industry." Thus, the Hoch-Smith resolution in 1925 said rate making should consider "conditions which at any given time prevail in our several industries," directed the Commission to make "the lowest possible lawful rates" on agriculture and livestock. To compensate the rails had to hike industrial rates.

This farm-favoring attitude stretches beyond the rails. When highway carriers were brought under the ICC in 1935, Congress specifically exempted "motor vehicles used exclusively in carrying livestock, fish or agricultural commodities" but "not including manufactured products thereof." The widespread use of these unregulated farm product trucks has been costly to both railroad and regulated trucker.

Competition Brings New Woes

Regulatory philosophy added another aspect during the Depressed Thirties when excessive competition was greatly blamed for the woes of railroads and other carriers. The National Transportation Policy enacted in 1940 prohibited "destructive competitive practices" by all



C&NW makes money on commuters

types of carriers subject to the ICC. The railroads vehemently argue the Commission under this policy established a rate "umbrella" which forced rails to maintain their tariffs at artificially high levels to protect other common carriers. The rails claim they are the low-cost overland carrier and should be allowed freedom to reduce rates on competitive traffic if such a rate is non-discriminatory and compensatory.

The rails achieved somewhat of a victory when the Transportation Act of 1958 decreed "rates shall not be held up to a particular level to protect the traffic of any other mode of transportation." However a clause demanding "due consideration to the objectives of the [1940] National Transportation Policy" clouded the meaning.

Even more cloudy is just what is "non-discriminatory, compensatory, reasonable and just." Rival attorneys and accountants can have a merry tussle over whether to include point-to-point delivery, full or out-of-pocket costs and value of service. Assistant secretary of the ICC Robert J Test allows: "It is far from black & white. The ICC must consider many other things beside cost. The Act prohibits destructive competition."

The first rate decision under the Act was last Fall's "Paint Case" won by the Eastern rails. It allows for example a rail base rate from Detroit to New York of 79¢ a 100 pounds *v* a truck rate of \$1.24. Both are for a minimum 30,000 pound shipment. Other rail *v* motor reductions include tobacco from North Carolina to the Midwest, sulphur from New York to Buffalo. But in each case the rate applies only to certain carriers in certain areas. All of which is a far cry from only yesterday when the rails continually protested the bureaucratic

C&NW freight yard in action



slowness and reluctance of the ICC in permitting rate increases. Now the rails look on lower rates, incentive rates and guaranteed rates as a way to woo new business.

In another rate case however the railroads were permitted to slash their pulpwood rates 30% from Georgia to New York but were forced to offer a similar 30% reduction on the rail portion of a combination rail-water service in which Seatrain Lines ships freight cars from Savannah to New York harbor. But again the ICC decision was extremely specific.

The 1958 Act contained other balm for the rails:

- The ICC can guarantee up to half a billion in loans for additions, improvements and maintenance. Twelve railroads have already applied for guarantees totaling \$79,000,000. To date the Commission has approved eight of them for \$61,000,000. The guarantee provision runs through March 1961.
- The scope of the troublesome "farm product" truck exemption clause has been sharply cut back. The courts had liberally extended the free-from-regulation category to many processed items. Now further expansion was "frozen" and many commodities were returned to motor carrier regulation.
- Permission to curtail service was greatly eased including the right to appeal to the now-sympathetic ICC on intrastate train abandonments if state authorities deny the request or fail to act on it within 120 days. On interstate service state commissions can be bypassed completely.

The effectiveness of this provision was brusquely illustrated by the New York Central whose West Shore division had run annual deficits as high as \$2,750,000. Central asked the New York and New Jersey utility commissions for permission to drop the service in December 1954. But not until the Central could appeal to the ICC under the 1958 Act was it able first to drop its cross-Hudson ferry in March 1959 and nine months later the trains. Including the West Shore line, the Act has so far shunted 107 passenger trains to the lay-up track.

State Rules and Regulations

The Act's abandonment provisions emphasize the trend from state to Federal authority. Not that the state commission will lack for work. In just about every state the local commissioners rule not only on transportation but also on utilities—by far their most important job. And in Texas the anachronistically named Railroad Commission

gets national attention as the regulator of oil production "allowables."

In 16 states so-called full crew laws fix the minimum size of a train crew; in a few others the regulatory commission can set such minimums. A thorough report by the New York Public Service Commission early this year recommended outright repeal of the New York State full crew law as totally unsound and unwarranted, noted the commission itself would still have the right to impose any conditions which might be required for safety. The New York legislature gingerly refused to act on the recommendation this election year. Any repeal action would be a major psychological victory in the drive against featherbedding but actual results would be limited at first since of the 2,000 "excess" crewmen now required by New York law 1,598 are guaranteed their posts under the current labor contracts.

Experiments in Commuter Aid

Another subject painfully left to state and local handling is any real hope of aid for commuter service. Since October 1958 Philadelphia has experimented with a more than \$500,000 a year subsidy for the Pennsy and Reading in return for improved service and lower rates on two Reading and one Pennsylvania branch lines. Since the plan began passenger patronage has increased 30%.

The New York legislature six years ago granted drastic relief from local taxes for the then-bankrupt Long Island and commuters have been rewarded with better equipment and fewer delays. Other commuter-cursed roads, notably the desperate New Haven, have filed strong pleas for subsidies or tax relief. Only last week the New Jersey Senate offered a \$6,000,000 maximum subsidy to nine major railroads if they meet certain conditions.

While Washington seems to have little desire to come to the aid of the commuters and their states, despite some bills bravely introduced by Eastern Congressmen, most transportation difficulties remain basically in the Federal domain. The US Commerce Department this March suggested its solutions which on the whole should please the railroads and dismay their competitors. First, "rates should be based primarily on cost." Then it recommends user charges for Government-built rights-of-way and facilities (as does Labor Secretary Mitchell), also encouragement of rail consolidations and an investigation of state & local taxes on railroad property. Commerce Secretary Frederick A Mueller concludes: "Regulation is needed primarily to protect the public against monopoly abuses and as competition grows in transportation, regulation should shrink."

Rails Cross Ties with Competition

WHILE THE ICC was busy prescribing rail rates and curbing rail abuses, the snorting iron horse which had the intercity pasture pretty much to itself when the Commission was foaled in 1887 began to feel the nudge of new competitors as the decades passed.

River shippers, who had dominated American commerce before development of the railroad nearly beached them, aggressively regrouped and during this century again became a major freight handler. Common carrier pipelines began to furrow their right-of-way through the countryside. Most important was perfection of the internal combustion engine and the ensuing maze of highways.

The unquenchable exhaust of the auto revolution suffocated rail profit from passengers by 1929, except for the brief wartime respite of 1942-45 when passenger service averaged \$121,000,000 in the black. Meantime the constantly increasing numbers of privately owned, exempt, contract and "for hire" trucks carted off large chunks of rail freight traffic as well.

With the rails closely regulated and also largely fenced in by their own rigid rate structures the competitors could and did hit the rails hard and where it hurt most. Uncurbed by Government controls these over-the-road carriers were able to "skim off the cream." They selectively carted off much of the high-profit, small-packaged manufactured goods, left the rails toting mostly low-profit heavy-tonnage bulk freight like coal, ore and building materials.

The rail share of traffic eroded further in the postwar years.

Great Northern freights exports to dockside



From the 904 billion ton-miles of 1946 total intercity commercial freight shipments expanded to nearly 1.3 trillion ton-miles last year. But the rail portion declined during this period from 67% of the total load to about 45%. By contrast during the same period truck freight grew from 9% to 22%: pipelines from 11% to 18%.

Competition On, Under, By & Above the Road

Trucks continue to be the fastest gainers. Last year trucks logged 290 billion ton-miles of intercity freight for a 20% increase over 1958. More specifically trucks carted 81% of all agricultural products, 59% of all timber, 65% of new autos and 90% of household goods. They even made inroads into the one-time rail domain of wheat transport, also cart over 30% of cement and coal tonnage.

Over half the 11,000,000 trucks which roam streets and highways are engaged in local or intrastate service only. The rest venture into interstate transport and come under some sort of ICC regulation. But only some 2,000,000 are "for hire" trucks subject to rate regulation as common carriers. The remainder belong either to private fleets or to two special classes which the ICC regulates only as to safety:

An Inside Look at Yesterday

The grandeur of the old time railroads is illustrated in these photographs of a diner (right) and the private car of Emperor Dom Pedro II. Both were built by American Car & Foundry, now known as the streamlined ACF Industries. Before the turn of the century, gentlemen and ladies vied with sumptuous, rococo private cars, then called "varnishes."

The first private cars were probably those customized for US Presidents. The B&O assigned one to President Harrison. An ill-fated car for Lincoln was finished only in time for his funeral procession.

Sometime after the War Between the States private cars became badges of railroad fortunes associated with such names as Vanderbilt, Hill and Harriman. Presumably they served for business as well as pleasure. But actually as their aura of glamor increased, "varnishes" became more & more showpieces of great social prestige.

Lucius Beebe, historian of the private car (and master of the only



- 1) "exempt carriers" which haul mainly farm products and fish;
- 2) "contract carriers" which transport freight under specific contract with an individual shipper. All told, only about one-third of intercity truck tonnage is hauled by the common carrier operators.

Truckers stress their vehicles' greater flexibility and often better service. They cite door-to-door service; less handling and packaging; quicker deliveries; and the advantage of smaller inventories.

The railroads of course point out they are still the most economical haulers and can prove it when permitted to charge a competitive rate. This despite the fact truckers enjoy an "uncompetitive advantage" on their Government-built and maintained rights-of-way for which their only cost is relatively light highway user taxes plus turnpike & bridge tolls. The rails not only pay property taxes on their tracks, they also maintain them. Together maintenance and local taxes average \$7,400 annually for each mile of railroad.

Surprisingly, the least visible means of transport now carries nearly one-fifth of all freight tonnage. The 190,000 miles of subterranean pipelines last year hauled 228 billion ton-miles of petroleum and

remaining privately owned one in America), reports their costs varied from \$20,000 in the 1870s to \$150,000 in the Roaring Twenties. All were gilded and festooned in fine fashion and some sported extravagances like Turkish baths, wine cellars, jewel safes, gold table services and even English butlers.

As the Twenties came to a crashing halt, so did the private car. Many have come to rest in museums. Today's on-the-rail version bears little resemblance to its proud ancestor. Most are practical business cars which serve as an office on wheels for top railroad executives.

Washington's attitude has changed too. President Ike prefers a helicopter for short hops or a swift jet for longer trips.



derivative products. A small amount of coal slurry (pulverized coal carried in water) was also transported. The silent underground network boasts both the lowest maintenance costs and the lowest operating charges in the transport industry. It costs more to mail a postcard than it does to transport a gallon of crude oil from Montana to New York over 2,100 miles of interconnected pipeline.

The big obstacle to pipeline growth is the limited group of pipeable products. But experiments indicate the future may see oil and wheat travel cross country in the same pipeline with no more intermingling than network shows and private phone calls now have on a coaxial cable.

First exploited by the Phoenicians over 3,000 years ago, water is still the most economical carrier for many bulk products at 2-to-3 mills a ton-mile *v* a 14 mill rail average. Last year some 29,000 miles of navigable waterways plus the 1,140 miles of Great Lakes ship lanes carried about 15% of the total US intercity freight. This water right-of-way is free of all tolls and duties unless the ships venture through Canada's Welland Canal and the Seaway. But like the economical pipeline carriers, waterways have one serious drawback—points of delivery must be directly located on the water route. Also Northern waterways are frozen during the winter.



Although air freight still represents less than 1% of total freight tonnage it will present increased competition in the years ahead. New planes such as the CL-44 turboprop freighters (built by the Canadair division of General Dynamics) with their swing tails can carry 36 tons of freight and cruise at 400 miles an hour. Also passenger jets with greater cargo space and reduced flying time may permit an increasingly attractive cost & time combination.

Fully conversant with all these modes of transport, Union Carbide traffic manager Frank Tighe has some interesting comments on the 218,000 miles of railroads: "We shippers know the rails are here to

stay. It will be some time before there will be anything more efficient than the diesel and a long string of cars. The attitude of the rails has changed. They no longer think pessimistically; rather a new constructive outlook is evidenced in their efforts to secure more traffic with improved services, piggyback, automated facilities, some relief from featherbedding, newer and better equipment." Leading freight forwarder Morris Forgash of US Freight agrees. He says: "There has been more hopeful aggressive thinking in the railroads in the last two years than there had been in the previous 20."

As a forwarder Morris Forgash consolidates freight shipments and moves them by whichever means of transportation is most advantageous in each case—whether rail, truck, barge or plane or increasingly a combination.

A Future in Combination Service

As a transport customer Frank Tighe also stresses the future of combination service. He explains: "When the rails, highway and water carriers get together and agree on a through transport rate, everyone profits. The shipper gets a better rate and better service and the common carriers get more freight." The dramatic development of piggyback (see page 25) and containerization should make mixed-media shipments ever more feasible and popular.

But already evident is a jurisdictional fight bound to get more bitter as combined services flourish. The big question: whether through service should simply be a combined effort of different transportation specialists or whether one type of carrier should be permitted to "integrate" or "encroach on" (the choice of word depends on where you sit) the entire service.

At present railroads have only limited authority to enter other transportation fields. A key case now before the ICC is the request of Illinois Central and SoPac to buy the John I Hay barge line. If granted (and upheld by the courts) this might clear the channel for increased rail integration efforts. In any case legislation now pending in Congress would authorize the roads to own and operate other forms of transportation. Passage is highly doubtful but if successful the railroads with their control of the basic communication lines and greater financial strength expect to hold the top position. This adds to the general feeling of confidence which shipper Tighe describes thusly: "For the first time the rails now realize they have an advantage. In mass transport they can haul 50-ton carloads any number of miles with no highway limitations."

Mergers Spearhead Rail Cost-Cutting

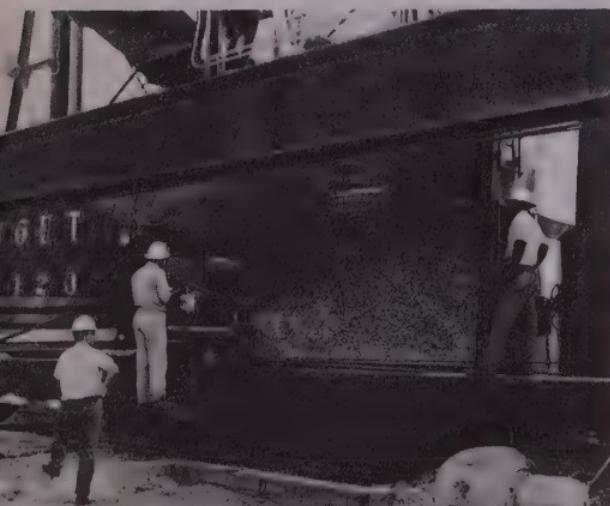
THE WORLD of railroading today is more gloomy to outsiders than to many in the profession. Railroad men know they have problems. But a spirit of determination persists. Developing new business is vital. But even more important is to find ways to cut expenses, for only economies will permit the rates needed to attract new business. Railroad men say there are three main ways to do this: mergers, new equipment & techniques and improvement of labor practices.

Recently rail investors were greeted with two concrete merger announcements in two days. First the C&O and the B&O and then the Atlantic Coast Line and the Seaboard directors reported they had agreed on terms of their respective mergers. Now all that remains is to secure ICC and stockholder approval. The news was especially noteworthy because for nearly 40 years rail managements have shown decided apathy toward cost-saving mergers.

But late last year the N&W and the Virginian completed a merger and a couple of months ago the Erie and the Lackawanna received a favorable report from an ICC examiner. These two events broke the long logjam. Even more encouraging, the ICC in approving the N&W-Virginian marriage noted: "The monopoly status enjoyed by the railroads in the Nineteenth and early Twentieth Centuries has now disappeared completely with the emergence of strong and growing competitors." Estimated annual savings within five years: for the Coast Line-Seaboard duo, \$38,700,000; for the N&W, \$12,000,000.

Other merger discussions are underway. The Milwaukee and the Rock Island are exploring union. The N&W, not content with the Virginian, sets its sights also on the Nickel Plate; Great Northern and Northern Pacific have been talking for more than three years. Last week Al Perlman told stockholders bluntly NY Central will insist on a role in the C&O-B&O merger. Announcements by many more merger-seeking carriers are sure to come.

Southern unloads new wood chip car



All these proposals face much hard work, argument and compromise. For many reasons a rail merger is the most complicated type of corporate union on the US scene. First the necessary feasibility studies are more detailed and searching than for other corporations. The rail corporate structure in itself is exceedingly complex. Also there are many working relationships and much property involved. Secondly, there are many interested parties. Almost all are articulate and fully staffed with lawyers. There are the ICC, the SEC (which must approve proxy material), competing railroads and potentially the Justice Department. There are bondholders, stockholders, labor unions, not to mention shipper organizations and passengers and their often-vocal municipalities.

Anatomy of a Merger

For an idea of the work, time and thinking which go into a merger, sit down with Lackawanna comptroller Philip D Jonas who is in the midst of his road's junction with the Erie: "We originally started with three roads—the Delaware & Hudson was the other one—back in September 1956. All studies were made on that basis. Then 1958 earnings came out in the Spring of 1959 and our financial consultants threw up their hands." Soft coal hauler D&H (much smaller than its would-be partners but traditionally a relatively stable money maker) reported good net earnings while both Erie and Lackawanna were in the red. No exchange of securities could be worked out.

The impasse was particularly disappointing because nearly two years of incredibly detailed economic study had revealed many advantages in a three-cornered merger. Consultant to the trio, Wyer, Dick & Company, along with a top management man from each road, plowed through more than a score of different studies involving every department of the three roads.

Fortunately for the Erie and the Lackawanna much of this work



New Haven tamps its ballast

still applied to the two-way merger and Wyer, Dick finished the follow-up study in only a few months. The results: the two roads should realize gains right away from joining; gradually the savings should mount to over \$13,000,000 a year within five years. Some 100 miles of duplicate or unproductive track will be eliminated, a main freightyard will be expanded in Buffalo. Adds railman Jonas: "Strangely, capital expenditures will not be very high because we will get a great deal in salvage from track we take up."

Stockholders and bondholders approved the merger last Fall and the favorable ICC examiner's report, nearly 100 pages counting tables, came in March. Still to come is final Commission approval. Says Lackawanna president Perry M Shoemaker: "We'll be delighted if we get final approval by September."

Railroad Need for Consolidation

A railroad's willingness to undergo such labors reflects recognition of the great need for consolidation. Says Pennsy president Allen Greenough: "Our industry must face up to the simple fact that there are just too many railroads * * * that mergers and the consequent elimination of duplicate facilities and wasteful competition within the industry are the only solution."

However such admonitions draw a demurrer from Chicago & North Western's energetic chairman Ben W Heineman: "Railroad managements must be careful not to use mergers as substitutes for the difficult steps necessary for improving productivity. Mergers are very tempting; my fear is that they will give roads a shot in the arm, then they'll be back where they are."

What Ben Heineman regards as more essential is the cost-cutting a road can do only by itself: installing new equipment and methods; eliminating unprofitable services.

Thanks to some stringent economy measures the C&NW's suburban service was possibly one of only two major commuter lines in the country to operate in the black in 1959, though it only pocketed \$29,554. This compared with a \$1,593,000 loss in 1958, even higher ones in previous years. The Long Island Rail Road which received some tax relief netted \$334,000 in 1959.

The railroads are also taking many steps to zip up rail freight service. Here the electronic age has arrived in the accounting office with computing machines, in the yard to trace and direct cars and out on the main line with microwave for fast communication.

Southern Railway has ordered an IBM 7080 transistorized data

processing system to replace a 705 at its computer center in Atlanta. It will handle corporate accounting, disbursements and general management reporting as well as studies on advanced cost-finding techniques and business problem simulations.

The Milwaukee's Carscope system traces freight car movements, has a pushbutton lazy susan to give the road and its shippers up-to-date news on every carload of freight. A big boon: it spots all types of empty cars so they can be shifted to where they are most needed. It also sends advanced data on train makeup to each freight yard ahead of arrival. Similar systems are the North Western Car-Fax and C&O's CLIC (car locating information center). The New York Central, Erie and B&O also keep track of freight traffic in this fashion.

More than ever freight cars today are subject to electronic regulation. On main line track CTC (centralized traffic control) coordinates signaling and switching from remote control centers, allows almost double the usage for any one track. This permits roads to take up unnecessary track, salvage it for use in yards and industrial sidings. The C&O has over 2,000 miles of CTC; the Pennsylvania 1,272; New York Central will have more than 1,500 miles when 1960 installations are completed. Electronics also rule many big switch yards (see inside back cover).

A number of other improvements have also brought substantial savings to roads. Foremost is mechanized track maintenance. There are also devices to guard against freight car damage such as the Servo Corp hot box tracer. Pennsy installed 20 last year. Another cost

Electronics control NY Central yard



saver: continuous rail, welding the steel sections into unbroken ribbons which stretch a quarter mile or longer.

The Milwaukee has just bought nearly \$2,000,000 worth of mechanized track maintenance equipment. But it figures annual savings will come to \$1,230,000, pay off the investment in less than two years. The Milwaukee has also installed an on-the-spot freight car repair facility at its Bensenville Yard near Chicago. It cost \$910,000 but the Milwaukee estimates annual savings at \$297,000.

New Freight Cars Pack More Cargo

New freight car designs promise larger volume, safer hauling of current freight, economic transport of cargoes previously too expensive to move. For example the Southern has a car which carries wood chips from the timber source to paper and pulp mills. More than 16 feet high, the car can be opened up along its whole length for emptying by a special machine in less than a half hour. A bigger, less specialized type is Southern's newly delivered 111-ton capacity Reynolds aluminum coal cars.

But unquestionably the biggest railroad problem is labor. Over-staffed for their decreased volume which at present requires nowhere near their full capacity, the railroads also claim wasteful "featherbedding" costs them in excess of \$500,000,000 a year or 10% of their total wage cost.

The roads are currently negotiating wages with the rail unions which want a 25¢ an hour wage increase. The railroad counter-strategy is to ask them to take a pay cut. The Locomotive Engineers and the rail managements have agreed to accept wage arbitration from a non-Governmental board. A Presidential emergency board is investigating demands of the eleven non-operating unions.

In addition the three-year moratorium on work rules signed in 1956 expired last November and the roads are pressing for some featherbedding relief. Biggest bone is the fireman who has no fires to tend on the diesels but costs the rails a reported \$200,000,000 a year. The unions contend the fireman is necessary for safety. The roads counter an extra pair of eyes may be needed on passenger trains but not on freight; Canada, they add, has already unloaded the freight fireman.

As for the US negotiations, the roads have agreed to first settle wages before tackling work rules. And another factor which may push any featherbedding decision into next year is that major labor-management showdowns are frowned on every fourth November.

FINANCIAL STATISTICS SAMPLER

(All figures for consolidated system unless noted. Per share figures adjusted for splits and stock dividends of 10% or more.)

Year 5 yr Average	dollar figures in millions						— a common share —	
	Gross Operating Revenues	Pre-Tax Net Rwy Oper Inc	Operating Profit Margin	Inc Avail for Fixed Charges	Net Income	Earnings	Cash Dividends	
Atchison, Topeka & Santa Fe						12,990-mile Chi-Texas-Calif agric & indust RR. Cap: \$202,300,000 debt; 12,417,000 shs 50¢ non-cum pfd; 24,271,000 shs com. Recent price—"SF": 24		
3/31/60	\$634.9	\$ 96.3	15.2%	\$72.9	\$64.7	\$2.40	\$1.45*	
1959	633.8	99.3	15.7	74.1	65.8	2.45	1.45	
1955-59	601.6	103.5	17.2	76.5	68.5	2.57	1.52	
Atlantic Coast Line						5,290-mile Virginia-Fla agric & indust RR. Cap: \$159,500,000 debt; 1,500 shs \$5 pfd; 2,627,000 shs com. Recent price—"AX": 50		
3/31/60	159.5	10.1	6.3	19.0	12.3	4.89	2.50†	
1959	156.1	11.6	7.4	18.6	11.8	4.79	2.50	
1955-59	158.9	11.4	7.2	18.6	11.6	4.68	2.10	
Baltimore & Ohio						5,920-mile Phila-Chi coal & indust RR. Cap: \$445,500,000 debt; 600,000 shs \$4 non-cum pfd; 2,547,000 shs com. Recent price—"BO": 34		
3/31/60	401.5	21.8	5.4	31.5	11.8	3.68	1.50	
1959	395.2	24.6	6.2	34.8	14.8	4.87	1.50	
1955-59	427.3	36.4	8.5	42.3	21.8	7.61	2.00	
Boston & Maine						1,570-mile northern New England ind RR. Cap: \$102,500,000 debt; 266,000 shs \$5 conv pfd; 546,000 shs com. Recent price—"BMR": 9		
3/31/60	71.3	2.6	3.6	2.7	d2.4	d6.89	none	
1959	72.1	1.8	2.5	1.9	d3.3	d8.41	none	
1955-59	81.9	4.3	5.3	4.6	d0.3	d3.07	none	
Canadian Pacific						17,700-mile Can transcont RR; also varied invests. Figs in Canadian \$. Cap: \$479,000,000 debt; 28,200,000 shs 4% (£1 par) non-cum pfd; 14,332,000 shs com. Recent price—"CP": 26		
3/31/60	475.4	—	—	49.2	31.8	2.01	1.50	
1959	477.8	57.5	12.0	48.7	31.3	1.97	1.50	
1955-59	477.3	60.0	12.6	59.3	43.1	2.84	1.55	
Chesapeake & Ohio						5,130-mile Norfolk-Midwest coal RR. Cap: \$349,000,000 debt; 28,000 shs \$3.50 pfd; 8,184,000 shs com. Recent price—"CO": 63		
3/31/60	347.7	64.0	18.4	58.9	44.5	5.45	4.00	
1959	347.6	66.4	19.1	60.2	45.7	5.60	4.00	
1955-59	386.9	95.2	24.6	71.7	57.9	7.17	3.82	
Chicago, Milwaukee, St Paul & Pac						10,600-mile Chi-Seattle agric & ind RR. Cap: \$277,400,000 debt; 519,000 shs \$5 non-cum pfd; 2,123,000 com shs. Recent price—"ST": 22		
3/31/60	239.4	12.1	5.1	16.6	4.7	1.01	1.50	
1959	242.0	13.1	5.4	17.7	5.9	1.55	1.50	
1955-59	247.9	16.6	6.7	19.5	8.0	2.57	1.70	
Chicago & North Western						9,280-mile Chi-Omaha, Minneap & Duluth agric & ind RR. Cap: \$217,900,000 debt; 914,000 shs \$5 pfd; 812,000 shs com. Recent price—"NW": 19		
3/31/60	210.3	2.2	1.0	4.5	d3.9	d10.40	none	
1959	213.4	3.1	1.5	5.6	d2.9	d9.19	none	
1955-59	220.9	4.9	2.2	7.0	d0.9	d6.72	none	

*Indicated rate (may also include extras).

†Plus stock or spin-offs.

12 mos Year 5 yr Average	dollar figures in millions						— a common share —	
	Gross Operating Revenues	Pre-Tax Net Rwy Oper Inc	Operating Profit Margin	Inc Avail for Fixed Charges	Net Income	Earnings	Cash Dividends	
Chicago, Rock Island & Pac	7,540-mile Chi-Denver & Texas agric & ind RR. Cap: \$159,- 300,000 debt; 2,921,000 shs com. Recent price—"RI": 25							
3/31/60	\$216.5	\$13.6	6.3%	\$14.5	\$8.1	\$2.76	\$1.60	
1959	219.5	14.5	6.6	14.7	8.3	2.84	1.60	
1955-59	205.3	19.7	9.6	17.6	11.8	3.98	2.22	
Delaware & Hudson Co	763-mile NY & Pa ind & coal RR; also owns coal co (earnings a share consolidated; operating figs for RR co only). Cap: \$38,- 500,000 debt; 1,619,000 shs com. Recent price—"DH": 25							
3/31/60	46.4	7.0	15.1	7.1	5.6	1.93	2.00	
1959	46.2	7.1	15.3	7.0	5.4	2.04	2.00	
1955-59	51.8	11.0	21.2	8.7	6.9	3.53	1.97	
Dela, Lackawanna & Western	940-mile Jersey-Pa-Buffalo indust RR. Cap: \$115,900,- 000 debt; 1,639,000 shs com. Recent price—"DL": 7							
3/31/60	72.3	d0.7	d1.0	0.3	d4.5	d2.72	none	
1959	71.9	d0.7	d1.0	0.5	d4.3	d2.65	none	
1955-59	81.1	2.0	2.5	4.2	d0.7	d0.46	0.33†	
Denver & Rio Grande Western	2,130-mile Denver-Salt Lake indust RR. Cap: \$83,200,- 000 debt; 6,324,000 shs com. Recent price—"DGR": 16							
3/31/60	76.5	19.6	25.6	12.3	8.8	1.38	1.00	
1959	75.4	18.6	24.7	12.3	8.7	1.37	0.96	
1955-59	79.5	22.5	28.3	15.0	11.4	1.76	0.84	
Erie	2,240-mile NY-Chicago indust RR. Cap: \$202,600,000 debt; 125,000 shs \$5 pfd; 2,450,000 shs com. Recent price—"E": 9							
3/31/60	156.8	1.6	1.0	3.8	d4.4	d2.07	none	
1959	154.3	0.3	0.2	2.6	d5.7	d2.58	none	
1955-59	163.5	8.5	5.2	10.4	2.1	0.59	0.80	
Great Northern	8,290-mile Twin Cities-Pac NW agric & indust RR. Cap: \$254,000,000 debt; 6,100,000 shs com. Recent price—"GN": 45							
3/31/60	253.2	29.9	11.8	33.8	25.4	4.15	3.00	
1959	254.6	32.0	12.6	35.0	26.6	4.35	3.00	
1955-59	265.9	39.4	14.8	37.2	29.0	4.77	2.80	
Gulf, Mobile & Ohio	2,750-mile Chicago-Alabama ind RR. Cap: \$77,300,000 debt; 142,000 shs \$5 pfd; 917,000 shs com. Recent price—"GMO": 26							
3/31/60	81.3	7.2	8.9	6.1	2.8	2.21	2.00	
1959	82.1	7.8	9.5	6.1	2.8	2.17	2.00	
1955-59	83.1	9.7	11.7	7.3	4.3	3.34	2.00	
Illinois Central	6,500-mile Chi-New Orleans agric & ind RR. Cap: \$206,700,000 debt; 3,118,000 shs com. Recent price—"IL": 37							
3/31/60	271.6	27.0	9.9	22.9	15.3	4.90	2.00	
1959	271.7	26.8	9.8	22.8	15.0	4.83	2.00	
1955-59	283.9	36.5	12.9	27.6	19.8	6.39	2.95	
Kansas City Southern	890-mile KC-New Orleans & Texas agric & ind RR. Cap: \$67,- 000,000 debt; 375,000 shs \$2 non-cum pfd; 1,019,000 shs com. Recent price—"KCS": 75							
3/31/60	71.1	19.3	27.1	12.6	10.2	9.27	4.00	
1959	72.9	19.9	27.9	12.6	10.4	9.28	4.00	
1955-59	73.5	21.1	28.7	13.1	10.7	9.78	3.90	

12 mos Year 5 yr Average	dollar figures in millions						— a common share —	
	Gross Operating Revenues	Pre-Tax Net Rwy Oper Inc	Operating Profit Margin	Inc Avail for Fixed Charges	Net Income	Earnings	Cash Dividends	
Louisville & Nashville	5,700-mile Cinci-New Orleans & Atlanta indust RR. Cap: \$315,- 500,000 debt; 2,447,000 shs com. Recent price—"LN": 66							
3/31/60	\$230.4	\$33.9	14.7%	\$25.5	\$13.6	\$5.56	\$5.00	
1959	229.7	33.2	14.5	25.3	13.4	5.50	5.00	
1955-59	226.4	37.2	16.4	29.4	19.3	8.00	5.00	
Missouri-Kansas-Texas	2,920-mile St Louis-San Antonio agric & indust RR. Cap: \$156,- 700,000 debt plus \$73,400,000 non-int bearing certifs; 1,- 476,000 shs com. Recent price—"KT": 5							
3/31/60	57.6	3.6	6.3	4.4	d3.1	d2.08	none	
1959	58.4	3.8	6.5	4.5	d3.0	d2.02	none	
1955-59	66.8	4.4	6.5	4.9	d0.3	d3.20	none	
Missouri Pacific	9,460-mile St Louis-Texas agric & ind RR. Cap: \$587,300,000 debt; 1,872,000 A, 40,600 B shs. Income figs show "available net after all prior charges." Recent price—"MOP A": 40							
3/31/60	303.4	35.6	11.7	41.2	8.5	4.52	2.40	
1959	303.4	36.0	11.9	41.1	8.6	4.61	2.40	
1955-59	299.9	38.8	12.9	42.8	7.3	3.96	2.06	
New York Central	10,450-mile NY-Midwest indust RR. (Figures for company only.) Cap: \$703,900,000 debt; 6,500,000 shs com. Recent price—"CN": 24							
3/31/60	693.5	27.7	4.0	52.7	11.5	1.77	0.50	
1959	689.2	24.8	3.6	50.4	8.4	1.29	none	
1955-59	726.6	40.6	5.6	67.7	22.5	3.45	0.90†	
NY, Chi & St Louis (Nickel Plate)	2,170-mile Buff-Midwest ind RR. Cap: \$161,800,000 debt; 4,161,000 shs com. Recent price—"NKP": 38							
3/31/60	152.4	27.3	17.9	19.9	13.3	3.20	2.00	
1959	150.4	27.1	18.0	19.9	13.3	3.20	2.00	
1955-59	160.2	31.0	19.4	20.9	14.3	3.45	1.85	
NY, New Haven & Hartfd	1,760-mile south New Eng ind RR. Cap: \$175,300,000 debt; 492,000 shs \$5 pfd; 1,080,000 shs com. Recent price—"V": 5							
3/31/60	143.2	d11.1	d7.8	d3.4	d12.0	d13.37	none	
1959	144.3	d9.4	d6.5	d1.7	d10.8	d12.29	none	
1955-59	155.1	d0.8	d0.5	6.6	d2.6	d4.68	none	
Norfolk & Western	2,700-mile Norfolk-Ohio coal RR. Figs adjusted for Virginian merger. Cap: \$217,300,000 debt; 1,368,000 shs pfd (2 classes); 7,349,000 shs com. Recent price—"NFK": 99							
3/31/60	247.0	94.6	38.3	70.5	61.9	8.26	5.00*	
1959	247.0	93.7	37.9	69.3	60.7	8.10	4.70	
1955-59	273.2	94.9	34.7	62.0	56.8	7.41	4.04	
Northern Pacific	6,830-mile St Paul-Seattle agric & ind RR. Cap: \$297,400,000 debt; 5,986,000 shs com. Recent price—"NP": 43							
3/31/60	183.5	21.3	11.6	34.1	22.9	3.82	2.20*	
1959	183.6	22.8	12.4	34.9	23.9	3.97	2.00	
1955-59	183.7	23.0	12.5	32.1	21.4	3.59	1.63	
Pennsylvania	9,900-mile NY-Midwest indust RR. Figures for company only. Cap: \$659,- 800,000 debt; 13,168,000 shs com. Recent price—"PA": 13							
3/31/60	900.4	34.1	3.8	53.2	10.7	0.81	0.25	
1959	887.7	30.9	3.5	50.2	7.3	0.55	0.25	
1955-59	929.1	46.3	5.0	66.5	22.5	1.71	0.96	

Year 5 yr Average	dollar figures in millions							— a common share —	
	Gross Operating Revenues	Pre-Tax Net Rwy Oper Inc	Operating Profit Margin	Inc Avail for Fixed Charges	Net Income	Earnings	Cash Dividends		
Pittsburgh & Lake Erie		220-mile Pitt & Youngstown area ind & coal RR. Cap: \$48,-900,000 debt; 785,000 shs com. Recent price—"PLE": 100							
3/31/60	\$32.1	\$10.8	33.6%	\$10.8	\$8.9	\$11.93	\$6.00*		
1959	30.6	9.4	30.6	10.0	8.1	10.35	4.00		
1955-59	37.7	14.4	37.4	10.6	9.4	11.21	5.20		
Reading Co		1,300-mile NJ eastern Pa ind & coal RR. Cap: \$120,200,000 debt; 1,399,-000 shs pfd (2 classes); 1,399,000 shs com. Recent price—"RDG": 13							
3/31/60	109.2	5.9	5.4	7.6	1.9	d0.58	none		
1959	107.0	5.5	5.1	7.5	1.8	d0.68	0.50		
1955-59	121.5	14.0	11.5	13.4	7.7	3.49	1.55		
St Louis-San Francisco		4,560-mile St Louis-Texas & Ala agric & ind RR. Cap: \$205,400,-000 debt; 285,000 shs \$5 pfd; 1,837,000 shs com. Recent price—"FN": 18							
3/31/60	134.6	14.3	10.6	15.3	6.6	2.84	1.00		
1959	133.6	14.2	10.7	15.3	6.6	2.83	1.00		
1955-59	132.3	16.6	12.5	15.5	7.5	3.16	1.25		
Seaboard Air Line		4,150-mile Virginia-Fla industrial RR. Cap: \$117,100,000 debt; 4,835,000 shs com. Recent price—"SBD": 36							
3/31/60	161.9	25.2	15.6	21.4	17.1	3.52	2.00		
1959	161.4	26.0	16.1	21.4	17.0	3.52	2.00		
1955-59	159.1	27.0	17.0	22.6	18.4	3.85	2.27		
Southern		6,270-mile indust RR covering Southeast. Cap: \$210,200,000 debt; 3,000,-000 shs \$1 non-cum pfd; 6,478,000 shs com. Recent price—"SR": 48							
3/31/60	272.9	63.3	23.2	45.4	33.5	4.71	2.80		
1959	271.9	62.0	22.8	44.9	33.1	4.65	2.80		
1955-59	269.5	60.1	22.3	47.1	34.9	4.91	2.52		
Southern Pacific		12,220-mile Calif & Mid-America agric & ind RR. All figs for consol transportation system except earnings a share for co only. Cap: \$694,200,000 debt; 27,141,000 shs com. Recent price—"SX": 20							
3/31/60	694.5	73.6	10.6	76.7	50.8	2.61	1.12*		
1959	690.3	72.0	10.4	75.1	49.2	2.57	1.06		
1955-59	669.6	62.6	9.3	72.3	48.2	2.14	1.01		
Union Pacific		9,740-mile KC-Coast agric & ind RR. Cap: \$160,300,000 debt; 9,954,000 shs 40¢ non-cum pfd; 22,429,000 shs com. Recent price—"UP": 27							
3/31/60	511.2	73.1	14.3	66.9	62.4	2.61	1.60*		
1959	515.8	75.4	14.6	69.3	64.8	2.71	1.60		
1955-59	512.4	79.4	15.5	80.4	75.7	3.22	1.60		
Western Maryland		840-mi Balto-west coal & ind RR. Cap: \$84,700,000 debt; 567,000 shs pfd (3 classes); 1,703,000 shs com. Recent price—"WM": 32							
3/31/60	45.0	10.0	22.2	9.1	5.6	2.95	1.80*		
1959	44.9	10.1	22.4	9.5	5.8	3.12	1.53		
1955-59	49.0	13.9	28.4	10.9	7.6	3.99	0.62		
Western Pacific		1,190-mile Salt Lake-San Fran indust RR. Cap: \$54,500,000 debt; 1,825,000 shs com. Recent price—"WRS": 20							
3/31/60	52.6	5.5	10.5	5.4	3.3	1.80	1.00		
1959	52.9	6.7	12.7	6.2	4.1	2.24	1.00†		
1955-59	53.4	8.4	15.7	6.6	4.4	2.50	1.00†		

Piggyback — Newest Thing on Rails

At 1:40 on a May afternoon driver Larry Brandt of the New York Central's highway subsidiary NY Central Transport Company backed his Flexi-Van trailer No 9291 up to the loading platform at the Williamson, NY plant of food processor Duffy Mott Inc. By 4:35 No 9291 was loaded and ready to go with 32,000 pounds of Clapp's baby food worth more than \$3,000. By 7 PM at the Central's Rochester classification yard it was secured aboard flatcar No 500813 where it joined Flexi-Van No 9097. Train NC-1 picked up the car at 1:30 AM and the two trailers arrived at Central's East St Louis freight yards at 6:30 the following morning where each van was ready for morning delivery.

THIS IS piggyback (Central calls theirs Flexi-Van), the newest thing on the rails and almost unknown as recently as 1953. To laymen used to split-minute passenger trains, this schedule may seem laggard but to freight users it represents speed and efficiency.

Piggyback is actually old stuff. The idea dates back to the mid-Nineteenth Century when the Nova Scotia Railway began to ferry farm wagons to market. The Long Island Rail Road followed suit in the US in 1885. Reborn in a far more sophisticated version, today's piggyback is being used by the rails to get new traffic and recapture old. It accounts for only 2% of all freight car movements but last year it brought in more than \$150,000,000.

It is growing fast. From the 18 roads which loaded a total of 168,150 cars in 1954, piggyback has burgeoned to 50 roads which last year toted 415,156 flat cars (carrying some 580,000 loaded trailers). Piggybackers now include virtually all the major Class I rail-

**Easy loading for
Milwaukee Flexi-Vans**



roads. The Southern, which has held back so far, plans "an experimental" Atlanta-to-Chicago piggyback service "within the next 60 days."

Countless more railroads are expanding their service. President Stuart Saunders of the Norfolk & Western says his road will "step up service this year." Nickel Plate piggybacking is growing "by leaps & bounds" according to president Felix Hale who added the road hauled 15,796 trailers in the first four months of 1960 or almost double last year. The Pennsy which does more piggybacking than any other road expects a 25% increase in piggyback revenues this year. St Louis-San Francisco president Clark Hungerford says "piggyback service on the Frisco has increased substantially" despite a 2.3% decrease in total carloadings in early 1960.

Shippers Choice on Piggyback

One reason piggyback is catching on fast is it offers a variety of shipping methods to suit the customer. The New York Central trip is an example of Plan II which means the railroad handles the whole job from solicitation of the customer, to pickup, loading, shipping and delivery—all on railroad-owned equipment. Central also uses Plan III (shipper-owned trailers on rail equipment) and Plan IV where the road provides only the pull, the shipper supplies his own trailer and flatcar. Central has just started Plan V which gives joint truck-rail rates for through service and either carrier can solicit for the other. In addition most roads offer Plan I where the trucker handles all the business, simply pays the railroad a set fee for the distance it hauls his trailer.

Piggyback is attractive not only to the rail customer but also to the shipper who has never shipped by rail—the so-called off-track industries. Says one railroader: "This is railroad service without the expense of a sidetrack."

Piggyback often offers the shipper faster service (especially on long hauls) at competitive rates. For instance Central has two freight trains between Chicago and New York which are run at passenger speeds. The C&O hitches some of its piggybacks to passenger trains. So does the Burlington.

These things impress Morris Forgash, president of leading freight forwarder US Freight which also is the only non-railroad member of equipment leaser Trailer Train. As an ardent advocate of combination freight and passenger trains, he would be willing to pay extra fare for super-fast service to the West Coast. Says he: "I tell the railroads to speed up their freight business to passenger speeds—that's

where they make their money." He visualizes a 65-hour coast-to-coast movement in the not too distant future.

While piggyback business has boomed profits have trailed—at least to date. For one thing piggyback is expensive. The average 85-foot flatcar costs roughly \$16,000 as against \$10,000 for a boxcar. Also a full piggyback rig (flat plus two trailers) weighs a total of 46 tons empty v 23½ tons for a boxcar. One railroader claims: "Certainly business would be more profitable in a boxcar—if you could get it there."

Most railroaders are more optimistic. They point out piggyback cars average 250 miles a day v 50 miles for the average boxcar. Central insists "piggyback is the most profitable thing we have." Another railroader staunchly maintains, "of course piggyback is profitable. Otherwise we wouldn't be ordering all the new piggyback equipment we are." Morris Forgash pointedly argues: "It's the load factor and productivity that count. They're the equalizers."

One reason piggyback has not been a big moneymaker for all participants is of course it is still a baby. Says one railroader: "With only 2% of the carloadings how can we possibly tell now just how much money we'll make out of it."

Not all plans afford the same return. Some railroaders vote for Plan II since they get all the profit. But they still have terminal and loading costs. Plans III and IV avoid them. Besides, Plan III has a two-van rate empty or full while Plan IV provides for a return load.

Some railroaders think Plan V generates more revenue than Plan I. Plan I is still highly controversial since the trucker can use the railroad at will and this frequently means only at peak traffic periods. This may be the reason piggyback on the Pennsy never reached the gaudy estimates of \$100,000,000 by 1959 (last year's haul: \$16,000,000).

A profit booster may be standardization. Today piggyback equip-



C&NW loads for through-trip

ment comes in many different sizes & shapes—long and short flatcars, flush vans, different loaders, etc. This makes coordination difficult between the railroads themselves and between other modes of transportation. Fortunately the National Defense Transportation Association committee to study standardization already has agreed on an experimental standard container which would ride on any equipment. Another important factor: versatility. Says committee chairman Morris Forgash: "While empty car mileage will never entirely be eliminated since some freight always will require specialized equipment * * * it is my opinion an all-purpose container is capable of reducing empty car miles by at least 50%."

Once-Lost Traffic Returns to Rails

While railroaders look to future profits they currently rejoice in the hint of big volume in piggyback. And if this erupts as expected, one railroader notes "the rails can't help but make money" since essentially they make money on volume. Thus while some piggyback business has been "stolen" from the boxcar, piggyback enthusiasts maintain this traffic was about to leave the rails anyway. More important, it has regained much of the traffic which had been lost to the highway.

Railroaders are particularly happy about the growing auto business—a sort of piggyback on piggyback which began about 18 months ago. Traffic vice president Jack Gilliland of the Frisco which hauls 8-to-10,000 autos a month under Plan V says "we love it." Central freight sales & service vice president Arthur E Baylis called the first Flexi-Van auto shipment from Detroit to the East last month (a load of Chryslers and Valiants) a "major breakthrough." Throughout the US auto piggyback can be spotted on such lines as Santa Fe, Southern Pacific, the Milwaukee, the Chicago & Northwestern, Wabash, Burlington and the Rio Grande.

Other piggyback items are pointed out by Central Flexi-Van director Roy Milbourne—radio & TV sets, electrical appliances, chemicals, sugar, plate glass, all freight which had just recently been toted over the highways. Some Chicago packers even piggyback pigs to their Eastern plants. All told the business is booming with a 36% gain in nationwide piggyback in the first four months of 1960.

Indeed the future may even bring passenger piggyback. One tired motorist has already suggested the rails offer automobiles flatcar service while the riders are put up in Pullman for the night—a pleasant though probably uneconomical thought.

Rails Find Cash Off the Tracks

FOR MANY of the nation's railroads it is non-rail business which makes the difference between modest earnings or a good profit and in some cases any profit at all. Many railroads nowadays operate parallel trucking lines and at least two operate extensive trucking routes branching far from their strict rights-of-way. Directly operated or through capital interest, the railroads get money from pipelines, inland waterways, ocean shipping, other railroads and even cargo airlines. Away from transportation comes extra income from mining, oil, timber and real estate development.

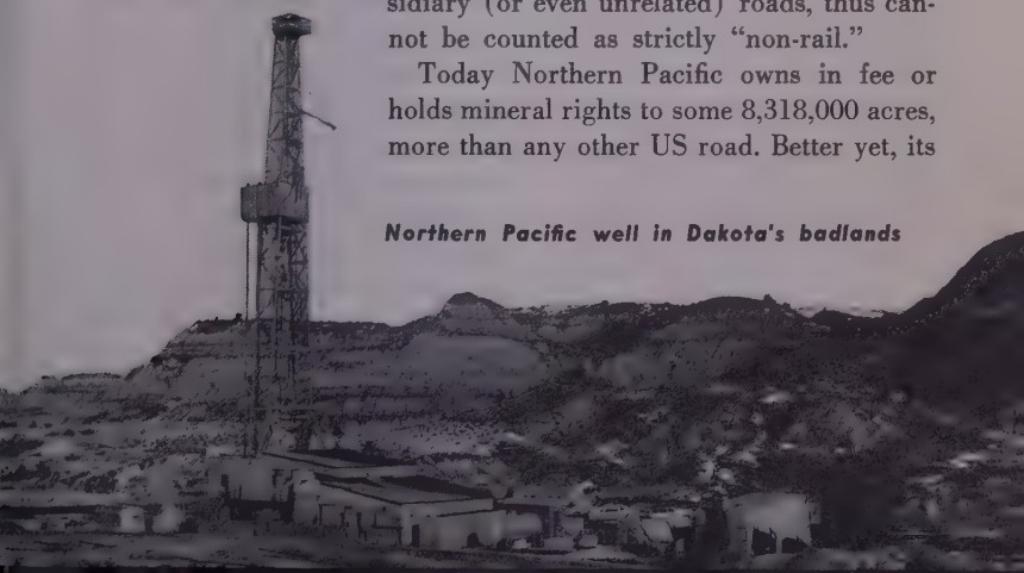
By & large the roads fortunate enough to be large land owners have fared best. They have collected millions every year from oil and gas wells or office buildings, warehouses and hotels.

To encourage railroads to make tracks into undeveloped areas, the Government gave away some 130,000,000 acres of land in the 1850s and 60s. In return the Government got reduced rates on its freight. Until 15 years ago this deal turned out poorly for the roads. By the time the agreement was repealed in 1946, they had returned in service ten times the original worth of the land.

Then came oil. Although the roads sold some 80% of the grants, some of the carriers had been foresighted enough to retain mineral rights and suddenly the Union Pacific, Santa Fe, Southern Pacific and Northern Pacific were sitting pretty. Last year anywhere from 20-to-60% of their total net income came from sources other than the operation of their railroads. Of course often "non-operating" income includes earnings or dividends of subsidiary (or even unrelated) roads, thus cannot be counted as strictly "non-rail."

Today Northern Pacific owns in fee or holds mineral rights to some 8,318,000 acres, more than any other US road. Better yet, its

Northern Pacific well in Dakota's badlands



tracks barrel right through the middle of the oil-rich Williston Basin and last year net income from oil & gas contributed \$5,700,000 before taxes. Gross timber revenues were \$3,900,000 and mineral royalties were good for half a million more. While Union Pacific has less acreage than Northern Pacific, its oil income from land specifically acquired for exploration is way ahead—\$19,350,000 in 1959.

From Production to Pipeline

At least three railroads have come to the conclusion that there is more income from oil than just production. In April the Great Northern announced it would follow Southern Pacific's lead into the pipeline business. This Summer Great Northern will start construction of a crude oil line from North Dakota's Lignite and Newburg fields to Minot, ND. Missouri-Kansas-Texas (the "Katy") has a 19% interest in Mid-America Pipe Line. A most interesting turnabout situation is Mississippi River Fuel which owns 19% of Missouri Pacific Class A common.

The Southern Pacific's pipeline subsidiary already has extensive lines running east from San Francisco and Los Angeles refineries and west from El Paso to Tucson and Phoenix. In 1959 income from their operation netted \$4,511,000, or 31% more than the year before. As a producer, SoPac does all right too. Last year gross oil & gas income came to \$3,118,000 while income from timber, agricultural and mining lands added \$4,024,000 more.

The Milwaukee Road's greatest natural asset is vast timberlands.

MULLIGAN STEW A LA ERIE

Railroad legend says "Erie Mulligan" is famous wherever trainmen gather. It is best when made in a caboose on a cast-iron, round-bellied stove but a modern kitchen will do. Here is the recipe:

Cut 3 lbs beef, lamb or veal in two inch cubes (some trainmen prefer rabbit, squirrel or pheasant when in season). Salt & pepper meat and dip in flour. Mix with two diced onions, then lightly brown in bacon drippings. Transfer to deep kettle, cover with water and simmer 30 minutes. Now add potatoes cut in large cubes plus four quartered carrots. Simmer another hour till meat is tender, aroma tantalizing. Just before serving add a bunch of diced chives, at the very last minute a dash of Worcestershire sauce.

Its 192,000 acres in Washington and Idaho logged \$1,900,000 to subsidiary Milwaukee Land Company last year which in turn paid its parent \$1,500,000 in dividends.

Special industrial development departments are standard baggage on railroads today. The Southern has a staff of 30 specialists who do nothing but go out, contact prospects, check raw material supplies, labor, water, etc. Norfolk & Western just launched an area development study with a team of six experts studying the Piedmont area. The result is not only extra

freight revenues but tidy land sale profits or lucrative rents. The Milwaukee realized \$2,716,000 last year from sales and rents of miscellaneous properties; SoPac a whopping \$9,500,000; Northern Pacific a shade below \$2,000,000 and Rock Island \$1,526,000.

The Eastern roads do their best with commercial real estate. Not endowed with thousands of open acres like their Western brothers, the city slickers still have valuable concentrations of in-town parcels. Among other things these roads cherish air rights.

The giant Pennsylvania grosses more freight revenue than any other US rail but last year owed 13% of its net income to off-track activities. Right now a study is underway on how best to utilize the air rights over Manhattan's mammoth Penn Station—to say nothing of Chicago, Trenton and elsewhere. The Pennsy had a hand in development of Philadelphia's modernistic Penn Center but is gradually selling out its interest.

Pennsy's real estate is not all commercial. In the days of steam engines, the most popular non-rail venture was coal mining as the roads had to assure themselves a fuel supply. The Pennsy now leaves the mining to others but directly and through its one-third interest in the Norfolk & Western it still controls 3 billion tons (repeat, billion) of coal reserves which currently yield \$500,000 a year.

The New York Central also leans heavily on non-rail income. Subsidiary Realty Hotels Inc operates New York City hotels Biltmore, Barclay and Park Lane which brought in \$5,421,000 last year. In addition the Central's leased air rights over its trackage house the Waldorf, Commodore and Roosevelt hotels as well as quite a few swish office buildings and the Yale Club. On Manhattan's resurgent West Side, a 100,000 square foot slice of four large blocks has been leased for the construction of \$4,000,000 Motel City which broke ground last week. The Central will receive a minimum rent, plus a percentage of the project's gross receipts. Pleased Central real estate vice president James Orland Boisi says: "It will probably net us in the neighborhood of \$1 a square foot at first and it could develop into much more than that."

Project Grand Central City

The Central has already decided how to use its most valuable air rights. During the next three years the world's largest commercial office building will rise behind Grand Central Terminal itself. The building, to be called Grand Central City, will cost an estimated \$100,000,000 and will yield the Central \$1,100,000 in annual rents.

Another new Central project: a \$96,000,000 co-op apartment over its Mott Haven yards in the Bronx.

Though it is constantly in dispute, the New York, New Haven & Hartford also has a claim on income from certain Grand Central properties. Under a 1907 agreement the New Haven is entitled to around 40%. Last year that amounted to \$5,260,000 but even with an added \$2,248,000 "other income," it was not enough to offset the troubled road's \$9,215,000 operating deficit.

Not to be outdone by the Western roads, the Central is considering a pipeline along its right-of-way—from New York City to Albany, thence west to Buffalo and east to Boston. Last November the road indirectly took to the skies when it bought \$5,000,000 worth of Flying Tiger Line 5-year convertible debentures. The Chesapeake & Ohio flew a similar pattern when it added \$3,333,000 of Slick Airways debentures to its investment portfolio in January 1957.

Fancy Diggings for Prestige and Business

Some of the nation's fanciest resort hotels are operated by railroads for prestige and more railroad business. Perhaps most famous is the Union Pacific's Sun Valley and the Great Northern's Glacier

Park Company operates hotels and motels in that national park. One Eastern resort is the C&O's beautifully appointed Greenbrier which now books conventions into 1963.

Despite entangled legislation against common ownership of rail and truck lines in this country, almost all railroads have their own trucks for less-than-carload short hauls. A few already operating when the Motor Carrier Act of 1935 was passed enjoy so-called "grandfather rights," can motor far afield from their rights-of-way. A classic example: the Denver & Rio Grande Western operates Rio Grande Motorways as a highway common carrier, a privi-

Fabulous plan for Grand Central



lege envied by other roads. Former Motorways chairman Alfred E Perlman, now president of the NY Central, expresses the railroadman's universal plea: "I want to be able to offer my customer the transportation service he needs. If railroad service doesn't meet his needs on a particular shipment, I want to be able to handle it by truck or barge or whatever means necessary."

The Rock Island Motor Transit Company turned \$89,600 in dividends over to its parent last year. And a Reading subsidiary operates a long distance charter bus service as well as trucks. Among its many activities the Northern Pacific now has coordinated rail-truck service over all of its lines west of North Dakota.

Ships and Rails and Real Estate

SoPac and Illinois Central are ready to launch into the barge business—if they can get Government permission (see page 15). The C&O also reportedly is interested in a barge line. Chessie is already a water carrier with a seven-ship fleet of train-car-passenger ferries on Lake Michigan and the Lake Erie Coal Company which transports coal to southern Ontario. Along with N&W and the United Mine Workers, the C&O has an interest in American Coal Shipping whose subsidiary AH Bull Steamship Company is an active shipper of general cargo to the Caribbean. Through Western Pocahontas Land Corp, the C&O owns West Virginia coal deposits which are well regarded for their natural gas potential.

The Southern Railway, Atlantic Coast Line and Seaboard are all part owners of a steamship company which operates between Baltimore and Virginia shore points. Most of ACL's "non-operating" income comes from dividends of Louisville & Nashville in which it owns a 34% stake. But ACL also owned valuable Florida real estate up until a few months ago when to simplify merger negotiations with Seaboard it spun off most of it.

Just the opposite move will be made this Summer by Maine's tiny Bangor & Aroostook RR. Plagued by disappearing passengers and a decline in potato, pulpwood and newsprint shipments, the B&A has reshaped itself into simply Bangor & Aroostook Corp. After what he called "the least satisfactory year in recent history," president W Gordon Robertson spoke for the railroad industry when he told shareholders: "Although the railroad business is and will continue to be our main source of endeavor, it appears to be in the best interests of the company and of its owners to expand the scope of our activities and enlarge our earnings base."

Huge Plant Spawns Securities For All

Sure, the railroads have \$3.50 invested in property for every dollar of revenue they take in compared with no more than \$1.25 for the steel industry. But some rails use as little as 20% of their physical capacity and can you imagine where the steel companies would be, operating at 20%?

THIS OFF-THE-CUFF REMARK by a seasoned rail observer adds perspective to some of the basic, interlocking and sometimes contradictory rail financial characteristics.

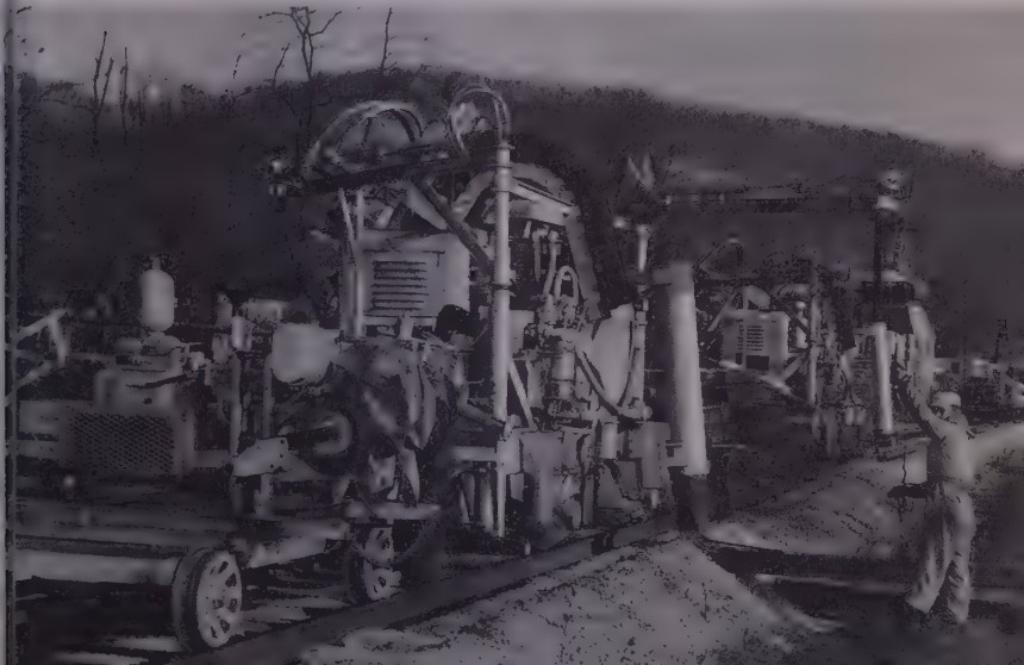
- The railroads have a tremendous physical plant and one which today would cost three times as much to duplicate (see page 2). However only a small part of the plant's potential capacity is used.
- On the bright side, this does present the opportunity for great financial improvement if more traffic can be tapped. Striking evidence of this was the War II experience: freight traffic doubled from 373 billion ton-miles in 1940 to 737 billion in 1944 with only 4.4% more locomotives, 6.7% more freight cars and no increase in miles of road. Not so incidentally, net income of the Class I rails soared from \$189,000,000 in 1940 to an average \$890,000,000 in 1942-44. By now freight volume has retreated one-fifth from the wartime highs and the profit potential hidden in the excess freight handling capacity is one big reason today's awakened railroaders are so eager to drum up more business through piggyback, more competitive rates, improved service and other traffic generating devices.
- But while in fine shape to handle any extra business they can entice their way, this vast but often under-productive plant requires much upkeep. The roads spend a billion and a quarter or more each year just for maintenance of ways & structures. While some work can often be postponed, basic failure to keep everything in good shape can prove costly as facilities deteriorate, resulting in poor and undependable service which drives more shippers away.
- Furthermore, while wartime necessity found everyone content to use such facilities as were on track, in today's competitive era attracting new traffic means substantial investment in more efficient equipment—from special cars and loading facilities for piggyback to modern "regular" cars to improved communications and office equipment, all reflected in a billion-a-year capital spending pace.
- One solace for the railroads is some of the excess capacity can be turned into cash through sales of unneeded properties including

warehouses, old passenger stations, abandoned tracks, etc. Here again, the greater efficiency accomplished by such currently prominent rail endeavors as mergers and centralized traffic control should not only curtail operating expenses but also put more duplicate facilities on the cash-yielding scrap pile.

- The huge capital investment is reflected in a massive capitalization of nearly \$15 billion (face value). This is divided among a vast array of securities which range from short-term equipment obligations prized by banks and institutions to liberal-yielding good-quality bonds and stocks all the way down the risk scale to radical speculations in bonds as well as stocks.
- But while investors and speculators are thus offered ample selection among outstanding securities, virtually the only new financing ventured by the railroads consists of equipment obligations. The Pennsy is about to offer \$35,000,000 in 25-year bonds. This issue, which merely refinances maturing obligations, is the first major rail bond financing in two years—to be exact, since Southern sold \$22,000,000 in 4½% first mortgage collateral trusts in July 1958. Stock sales are even more rare. There were just three by Class I roads in the entire Fifties; the latest by Bangor & Aroostook in February 1956.

The ample flow of funds for equipment issues amidst the drought of other rail financing springs from the twin wells of: 1) demand—about

Mechanics speed track maintenance



FAST AND SLOW GROWTH TRACKS

Operating Revenue Trends (1947-49 = 100) Around the Country

Fastest-Growing Regions Listed First

	1955	1956	1957	1958	1959
CLASS I RR AVERAGE	113	118	117	107	109
Central Western	119	121	123	121	126
Atchison, Topeka & Santa Fe	118	120	124	121	127
Western Pacific	129	129	131	125	127
Southern Pacific	121	123	120	118	125
Union Pacific	123	124	124	122	124
Chicago, Rock Island & Pac	101	107	112	111	117
Denver & Rio Grande Western ..	122	127	133	120	117
Pocahontas	124	140	146	119	116
Norfolk & Western	125	144	151	122	123
Chesapeake & Ohio	124	136	141	116	113
Southern	115	121	119	111	114
Seaboard Air Line	123	130	131	124	127
Atlantic Coast Line	123	129	126	116	121
Southern Railway	122	121	118	113	120
Gulf, Mobile & Ohio	111	111	113	106	108
Illinois Central	116	117	114	104	107
Louisville & Nashville	94	110	109	101	102
Northwestern	115	119	118	111	111
Great Northern	129	135	133	121	123
Northern Pacific	122	125	123	119	122
Chi, Milwaukee, St Paul & Pac..	102	105	105	101	100
Chicago & North Western	108	106	102	101	100
Southwestern	112	114	110	105	109
Kansas City Southern	129	131	125	116	124
St Louis-San Francisco	117	120	115	110	115
Missouri Pacific	111	112	110	108	111
Missouri-Kansas-Texas	97	98	88	81	77
Central Eastern	107	114	115	97	100
Chicago & Eastern Illinois	116	127	129	120	122
Western Maryland	113	125	131	108	107
Baltimore & Ohio	116	125	124	103	106
Pennsylvania	102	108	108	92	97
Central of Jersey	100	108	103	94	91
Reading Co	101	117	115	90	90
Great Lakes Region	108	111	108	94	97
NY, Chicago & St Louis	123	132	130	107	116
Erie	102	111	109	96	97
New York Central	105	107	102	91	95
Delaware, Lackawanna	98	105	102	90	85
Delaware & Hudson	97	106	103	85	85
Lehigh Valley	93	97	91	78	74
New England	100	103	102	94	90
NY, New Haven	99	103	104	95	92
Boston & Maine	99	101	99	89	83

two-thirds of postwar rail capital spending has gone for rolling stock; 2) supply—these issues are considered each railroad's best-secured obligations for which there are usually willing lenders. Under the standard equipment trust, the trustee for the certificate holders remains the legal owner of the equipment until it is all paid off. There is even a name plate bolted to the car or engine attesting the fact. The railroads have about \$1.8 billion of equipment trusts outstanding and \$1 billion in conditional sales contracts, an instalment agreement made with the manufacturer and usually placed directly with a bank or institution.

Bonds by the Boxcar

These hefty totals are dwarfed by the close to \$7 billion in various "regular" railroad bonds outstanding (slimmed from the bothersome \$11.9 billion of 1930). Most are listed on the NYSE where their current market value is down to \$5.1 billion. Since many mortgage structures were built up piecemeal over a three-quarter century period, it takes a battery of experts to sort out the various first, second, refunding, general and what-have-you mortgages (a single bond may have different priorities on numerous separate stretches of track), not to mention collateral trusts. Complex though it may be, analysis of the guarantees underlying each bond is vital—not only in time of trouble but because the current market evaluation depends on the amount of protection which would be available just in case any misfortune occurs. For instance a first mortgage bond on a lightly traveled branch line can be badly mauled in a reorganization since the trustees would be delighted to abandon this trackage.

On the average, a holder of high-quality rail bonds like C&O 4½s of 1992 can now receive a 4.78% maturity yield or a bit better than equivalent utility or industrial issues; medium-grade bonds like Great Northern 3½s of 1990 yield around 5.06%. Due to the general uptrend of interest rates and the parlous problems of the railroad industry, many of the rail bonds have declined way below par. This can be attractive to tax-conscious investors since they may be able to realize part of their maturity yield in capital gains rather than straight interest. Example: the Missouri Pacific first mortgage 4¼s of 2005 which sell at 69 and bring a current return of 6.16%.

In addition to the fixed interest securities, railroads have turned increasingly to income bonds on which interest (though largely cumulative) must be paid only if actually earned. Issued mainly as the junior debt issue in the reorganizations of the Forties and more re-

cently in exchange for preferred stocks, they protect the road's finances from excessive drain during bad years. The greater risk naturally must be rewarded with a higher yield than fixed-interest bonds; relatively best-grade income issues like Wabash 4s of 1981 offer a current return around 5.7%: lower-rated ones like the Milwaukee's 4½s of 2044, 6.7%.

There are still 35,800,000 preferred shares valued at \$703,000,000 listed on the NYSE but the number of issues is declining. Many recently reorganized rails like Western Pacific and the Rio Grande have all-common stock capitalizations: others like the Rock Island switched into income bonds. One surprising point to outsiders is many of the rail preferreds are non-cumulative including such veteran standbys as the Santa Fe's 50¢ stock (no payment missed since 1899) and Union Pacific (40¢ paid ever since 1888).

Common Outlook

If a road's basic and prospective earnings strength is important to the bond and preferred holder, it is obviously the most vital factor of all for the owners of common stock—of which there are 186,000,000 shares worth \$5.6 billion listed on the NYSE. Comments one veteran rail financier: "All the railroads are very much subject to cyclical swings but the more promising ones have been able to show good profits on the recoveries."

For the railroad industry generally the last five years represent a fair cross-section of good, bad and average years (the average results for these years are included in the statistical survey of the major

carriers on pages 21-to-24). Aggregate rail net income attained an alltime peak (in inflated dollars, of course) of \$927,000,000 in 1955; the next year was still exceptionally strong with earnings at \$876,000,000. But activity was declining by 1957 when the roads netted \$737,000,000 and then they sank into the 1958

Central assembles switch section ...



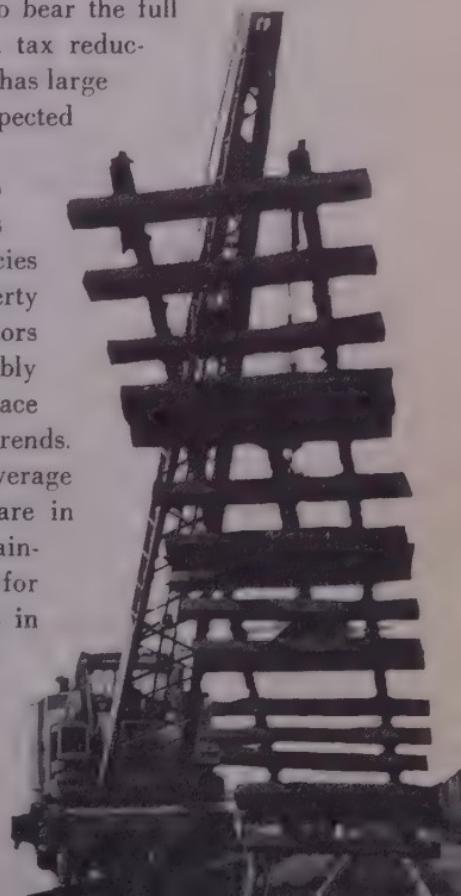
recession (\$601,000,000 net). Last year started with substantial improvement but the steel strike which cost the rails an estimated half billion in revenues downed overall earnings to \$578,000,000 though many individual roads managed to show gains.

The outlook for 1960 indicates general improvement though the less-than-expected business upswing and bad weather pushed aggregate first quarter net \$1,000,000 below last year's \$100,000,000. The second quarter is bound to fall below last year's hectic pre-steel pace. But barring a strike or major economic upheaval the final half seems equally bound to improve on the slowed-down year-ago figures with the total net for the year estimated around \$650,000,000.

A big question is what new labor costs will be imposed in any wage settlement. Here, as in so many instances, the roads already at a relative cost disadvantage will tend to be hit hardest. First, roads such as those in the congested East have a relatively large work force compared to traffic handled. Second, as Pennsy financial vp Dave Bevan moans: "Each penny an hour hike will cost us \$1,800,000 at present employment and we will have to bear the full cost without the cushioning effect of a tax reduction." Pennsy like many of its neighbors has large tax credits which will more than cover expected earnings.

The railroads of course continue to work hard for all sorts of cost reductions through automation, mergers, efficiencies and in a few cases even some local property tax relief. But with such basic cost factors as wages, supplies, etc almost inevitably continuing to rise, many observers place key emphasis on operating revenue trends. They figure the roads with better-than-average revenue growth (see table, page 36) are in best shape to absorb these costs and maintain satisfactory margins. This accounts for the relatively better showings of roads in fast-developing areas as the West and South, though in each region there can

...and lays track in panels



be individual exceptions—as for instance the Katy whose revenues have declined nearly one-fourth in the last decade while its Southwestern Region neighbors gained 10-to-25%.

A second group consists of the large industrial roads including Pennsy and Central which are particularly affected by the ups & downs of heavy manufacturing business as well as decentralization of industry. But with their huge overhead, the big cyclical swings provide a great deal of leverage.

Finally, the weaker roads with slight growth or declining areas are left with little prospect of mastering the impact of steadily rising costs—must seek their chief salvation in mergers into stronger systems.

The Cash Flows in Faster

Since money, other than equipment obligations and some direct bank loans, is hard to raise most roads finance their substantial improvements from retained earnings, depreciation, sale of scrap or disposal of other assets which may range from abandoned passenger stations to high-priced real estate. Thus, many experts consider cash flow receipts more significant than reported net earnings. One prime example: the New York Central which last year netted \$1.29 a share but had a cash flow of \$11.35. The Pennsy with 55¢ a share netted in 1959 boasted a \$5.50 cash flow.

Meantime the rails have been able to distribute a bit over 50% of their annual earnings to stockholders—though individual roads of course vary widely from this average and a dozen or so major carriers are currently paying nothing at all. But especially at the relatively depressed level of rail prices, some carriers provide quite a liberal yield as for instance Santa Fe, Chesapeake & Ohio and Southern.

And while present rail earnings may be modest, today's stock prices are often equally modest—even without considering any hopes for improvement. Thus, stocks like Kansas City Southern sell at eight times anticipated 1960 earnings, Illinois Central seven times and Baltimore & Ohio six times.

Investor's Reader Staff

Phebe Alexander, *Editor of Issue*

Barbara Buehrig

Betsey Casey

Anne Gregory

Maryjane Tanahey

Fred Weymuller

Henry R Hecht, *Managing Editor*

LA RUE APPLEGATE, *Editor*

Production

Carol Trick, *Artist*

Joyce De Mauro

Annette Miller

Contributors

Helen Bergquist

Thomas Brahany

James Collins

Allan Fogelson

Ben Hamel

Finley Iseman

Winthrop Lenz

Gillette Martin

Robert Mason

George Peregrin

Thomas Raynor

Ralph Scarpa

Eugene Sterett

Robert Tebeau

Armida Tommasi

James Wallace



CLASSIFICATION BY AUTOMATION

In a freight car classification yard like Southern Pacific's Englewood Yard in Houston, a car that is "over the hump" is by no means past its prime. Rather, this bit of railroad lingo means a car has been pushed past the crest of an artificial hump where classification begins. From there it is uncoupled and rolls by gravity onto one of many tracks below to become part of an outbound train.

With this description simplicity ends—a modern classification yard sorts thousands of cars daily and mazes of electronic equipment do most of the work automatically.

The real nerve center of a yard is the communications office atop the hump. From there closed circuit TV enables the yardmaster to see the freight car numbers on incoming cars as they arrive. Another panel shows him how many cars are on each track below. With this data he classifies the cars and puts the whole process in motion.

At this point a magnetic memory takes over. It programs the destination of an entire train of cars, later sets the switches which send each car onto the correct track. The speed of each car is controlled by computers which measure weight, rollability, distance and track conditions, then adjust jaw-like retarders on the track to bring each car to its proper coupling speed.

The Englewood Yard above is the largest on the SoPac system. It covers 359 acres, is 4 1/2 miles long, has 113 miles of track and can handle 7,200 cars at once. This yard is typical of others across the country (NY Central, Pennsy, etc) designed to cut costs and increase efficiency.

10th CENTURY

I and rail averages
nently sounder than
s day, have lagged
tastic growth of the
to keep from rolling
rm trend of the two
mance of the Gross
pattern is not apt to
of many an industrial
prices) promise good
cal improvement and
ange stature.

D-J INDUSTRIALS

GROSS NATIONAL
PRODUCT
(Billion \$)

RAIL REVENUES
(Hundred-million \$)

1930

1940

1950

1960

RAILS' RUGGED ROAD IN THE 20'S FROM BLUE CHIPS TO BLUES

600

500

400

300

200

100

0

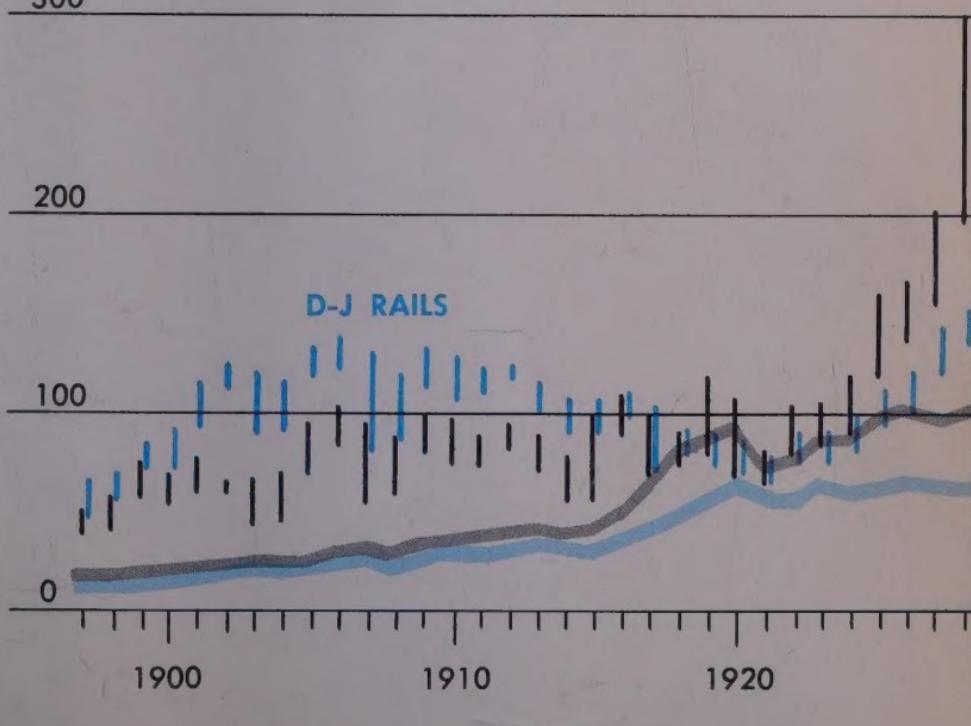
D-J RAILS

1900

1910

1920

This long-term look at the Dow-Jones industrial average graphically tells how rail stocks, considered eminently "speculative" industrial issues in great-grandfather's time, have come into investor favor this century. The reason is the favorable general economy while the railroads must struggle back. While there is no direct relation, the long-term stock averages matches closely the relative performance of National Product and rail operating revenues. The reverse. But if they cannot offer the growth prospect of common stock, numerous rail issues (especially at today's prices) offer high yields or the chance for speculative gains on cyclic movements. Perhaps (the Government willing) a more solid long-run





POSTHASTE

It was just a hundred years ago that the pony express went into operation between St. Joseph, Missouri, and Sacramento, California. The intrepid riders carried their messages almost 2,000 miles through hostile Indian territory and delivered them in an incredible eight days.

Our ideas of speed have changed considerably in a hundred years. Today jets cover the route of the pony express in about four hours, and messages can be transmitted even faster by telephone and telegraph. No wonder the tempo of our lives has quickened!

Every so often, someone asks, "Why all the rush?" We don't know why everyone else is in such a hurry, but speaking for ourselves, we put a premium on speedy executions of our customers' orders for two reasons. One is simply that our customers expect it; they want to buy or sell at a price as close as possible to the quote they received or the last report they saw on the tape in our board room. The other is that we must execute orders with speed and efficiency in this period of ever-increasing trading in the stock market.

That's why we have nine brokers on the floor of the New York Stock Exchange alone, why we keep acquiring the latest and fastest equipment from IBM and AT&T, Western Union and RCA, why we keep 280 people as busy as beavers in our New York Wire Room, nerve center of our operation—simply to serve you better all the time.

Accepted as controlled
circulation publication at
POUGHKEEPSIE, N. Y.

U OF I LIBRARY
CHICAGO UND GRAD C
NAVY PIER
CHICAGO 11 ILL

Published by
MERRILL LYNCH, PIERCE, FENNER & SMITH
INCORPORATED
70 PINE STREET • NEW YORK 5, N. Y.

Please send address changes to
Western Printing Co., Poughkeepsie, N. Y.